

SECRET

1 May 1961

MEMORANDUM FOR: Director, NPIC

SUBJECT : The Falconar Lens by Wild

REFERENCE :

25X1

1. During the American Society of Photogrammetry Meetings the Wild Heerbrugg Instruments Company disclosed a new lens design by their company which is just going into production. This lens is a f 1.4 aperture, 4" focal length which is being bought by the NATO forces for high speed, low altitude reconnaissance photography.

2. Enclosed please find samples which are $4\frac{1}{2}$ " enlargements of both the Falconar and its predecessor, the Taylor and Hobson lens. These films were taken in the late twilight

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The superiority of the f 1.4 is quite evident under these low ambient light conditions. If you will note it is possible to see lights on inside buildings as well as extreme detail in such low contrast objects as people against a background of a street. Because of the extremely high aperture of this lens I would predict that it has a very high resolution characteristic as well. It is apparent from the factors that the distortion characteristics for this wide angle lens are quite good. This produces pictures on a 2" x 2" format thus reducing the bulk of this camera system over a comparable $9\frac{1}{2}$ " camera.

3. I am requesting more details on the cube, length of film, etc. from Wild. In addition, I am requesting samples of original negatives, if possible, in order to run some resolution tests on the original material. It can be noted by comparing the two pictures that the image motion compensation for the Wild lens is far less than would be needed for the f 2 lens under these conditions. This very well might have application for use as a collection tool for our own forces.

Enclosures:

Two film samples
Referenced letter

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*orig. sent to
Kiefer as attach.
to pp-50-61
on 4 May*